IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): Mineral wool capable of dissolving in a physiological medium, characterized in that it comprises the constituents below in the following percentages by weight:

SiO ₂	39 - 44%, preferably 40 - 43%
Al_2O_3	16 - 27%, preferably 16 - 26%
CaO	6 - 20%, preferably 8 - 18%
MgO	1 - 5%, preferably 1 - 4.9%
Na ₂ O	0 - 15%, preferably 2 - 12%
K ₂ O	0 - 15%, preferably 2 - 12%
R_2O (Na ₂ O + K_2O)	10 - 14.7%, preferably 10 - 13.5%
P_2O_5	0 - 3%, especially 0 - 2 %
Fe ₂ O ₃ (total iron)	1.5 - 15%, especially 3.2 - 8%
B_2O_3	0 - 2%, preferably 0 - 1 %
TiO ₂	0 - 2%, preferably 0.4 - 1%.

Claim 2 (Currently Amended): Mineral wool according to Claim 1, characterized in that the CaO content is between 9.5 and 20%, preferably between 10 and 18%.

Claim 3 (Currently Amended): Mineral wool according to either of the preceding elaims claim 1, characterized in that it contains 20 to 25% alumina.

Claim 4 (Currently Amended): Mineral wool according to one of the preceding elaims claim 1, characterized in that it contains at least 2%, especially around 2 to 5%, MgO

Docket No. 288332US Preliminary Amendment

when alumina is present in an amount of less than 22%, especially from 17 to 22%, and in that it contains 1 to 4%, preferably 1 to 2%, MgO when alumina is present in an amount of at least 22% by weight.

Claim 5 (Currently Amended): Mineral wool according to one of the preceding elaims claim 1, characterized in that the alkali metal oxide content is preferably less than or equal to 13.0%, especially around 10 to 12.5% and in particular 12% or less.

Claim 6 (Currently Amended): Mineral wool according to one of the preceding elaims claim 1, characterized in that the R₂O/Al₂O₃ molar ratio is less than 0.9, especially at most 0.8 and in particular at most 0.75.

Claim 7 (Currently Amended): Mineral wool according to one of the preceding elaims claim 1, characterized in that it contains 2 to 6% iron oxide.

Claim 8 (Currently Amended): Mineral wool according to one of the preceding elaims claim 1, characterized in that it contains 1% or less of titanium oxide or less.

Claim 9 (Currently Amended): Mineral wool according to one of the preceding elaims claim 1, characterized in that it has a viscosity at a temperature of 1400°C of more than 70 poise, especially around 75 to 250 poise.

Claim 10 (Currently Amended): Mineral wool according to one of the preceding elaims claim 1, characterized in that its composition has a shrinkage at 700°C of less than 40% and a shrinkage at 800°C of less than 90%.

Docket No. 288332US Preliminary Amendment

Claim 11 (Currently Amended): Use of The method of using a mineral wool according to one of the preceding claims claim 1 in fire-resistant structural systems or as insulation employed at high temperature.